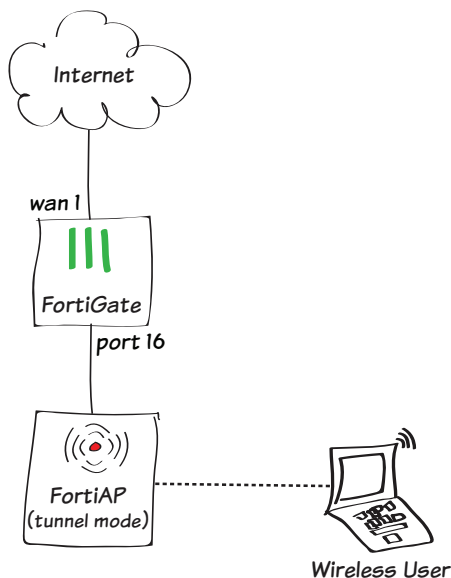


Using a FortiAP in Tunnel mode to add wireless access

You can configure a FortiAP unit in either Tunnel mode or Bridge mode. When a FortiAP is in Tunnel mode, a wireless-only subnet is used for wireless traffic. When a FortiAP is in Bridge mode, the Ethernet and WiFi interfaces are connected (or bridged), allowing wired and wireless networks to be on the same subnet. Tunnel mode is the default mode for a FortiAP.

In this example, a FortiAP unit is connected to and managed by a FortiGate unit, allowing wireless access to the network. For information about using a FortiAP in Bridge mode, see [“Using a FortiAP in Bridge mode to add wireless access” on page 73](#).

1. Connecting and authorizing the FortiAP unit
2. Creating an SSID
3. Creating a custom FortiAP profile
4. Allowing wireless access to the Internet
5. Results



1. Connecting and authorizing the FortiAP unit

Go to **System > Network > Interfaces** and edit the interface that will connect to the FortiAP (in the example, port 16).

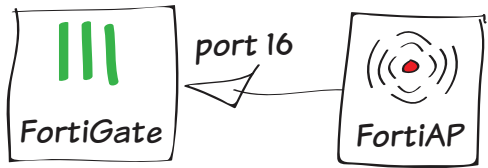
Set **Addressing Mode** to **Dedicate to Extension Device** and set an **IP/Network Mask**.


Connect the FortiAP unit to the interface.




Addressing mode ☐ Manual ☐ DHCP ☐ PPPoE ☐ One-Arm Sniffer ☒ Dedicate to Extension Device

IP/Network Mask

Connected Devices None





Go to **WiFi Controller > Managed Access Points > Managed FortiAPs**. The FortiAP is listed, with a  beside it because the device is not authorized.

Mesh	Access Point	State	Connected Via
	FAP11C3X13000412		 192.168.10.2



The FortiAP may not appear until a few minutes have passed.

Highlight the FortiAP unit on the list and select **Authorize**. A  is now shown beside the FortiAP, showing that it is authorized but not yet online.

Mesh	Access Point	State	Connected Via
	FAP11C3X13000412		 192.168.10.2

2. Creating an SSID

Go to **WiFi Controller > WiFi Network > SSID** and create a new SSID.

Set **Traffic Mode** to **Tunnel to Wireless Controller**.

Select an **IP/Network Mask** for the wireless interface and enable **DHCP Server**.

Set the **WiFi Settings** as required, including a secure **Pre-shared Key**.

Interface Name	<input type="text" value="wireless"/>				
Type	<input type="text" value="WiFi SSID"/>				
Traffic Mode	<input type="text" value="Tunnel to Wireless Controller"/>				
IP/Network Mask	<input type="text" value="10.10.10.10/255.255.255.0"/>				
Administrative Access	<input type="checkbox"/> HTTPS <input type="checkbox"/> PING <input type="checkbox"/> HTTP <input type="checkbox"/> FMG-Access <input type="checkbox"/> SSH <input type="checkbox"/> SNMP <input type="checkbox"/> FCT-Access				
DHCP Server	<input checked="" type="checkbox"/> Enable				
Address Range	<div><div>Create New Edit Delete</div><table><thead><tr><th>Starting IP</th><th>End IP</th></tr></thead><tbody><tr><td>10.10.10.11</td><td>10.10.10.254</td></tr></tbody></table></div>	Starting IP	End IP	10.10.10.11	10.10.10.254
Starting IP	End IP				
10.10.10.11	10.10.10.254				
Netmask	<input type="text" value="255.255.255.0"/>				
Default Gateway	<input checked="" type="radio"/> Same as Interface IP <input type="radio"/> Specify				
DNS Server	<input checked="" type="radio"/> Same as System DNS <input type="radio"/> Specify				
Advanced...					
WiFi Settings					
SSID	<input type="text" value="myWiFi"/>				
Security Mode	<input type="text" value="WPA2 Personal"/>				
Pre-shared Key	<input type="password" value="*****"/> (8 - 63 characters)				

3. Creating a custom FortiAP profile

Go to **WiFi Controller > WiFi Network > FortiAP Profiles** and create a new profile.

Set **Platform** to the correct FortiAP model you are using (in the example, FAP11C).

Set **SSID** to use the new SSID.

Name	<input type="text" value="myprofile"/>
Comments	<input type="text" value="Write a comment..."/> 0/255
Platform	<input type="text" value="FAP11C"/>
Radio 1	
Mode	<input type="radio"/> Disable <input checked="" type="radio"/> Access Point
Spectrum Analysis	<input type="checkbox"/>
WIDS Profile	<input type="text" value="Click to set..."/>
Radio Resource Provision	<input type="checkbox"/>
Client Load Balancing	<input type="checkbox"/> Frequency Handoff <input type="checkbox"/> AP Handoff
Band	<input type="text" value="2.4GHz 802.11n/g/b"/>
Channel	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input checked="" type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input checked="" type="checkbox"/> 11
Auto TX Power Control	<input checked="" type="radio"/> Disable <input type="radio"/> Enable
TX Power	<div><div></div><div>100 %</div></div>
SSID	<input type="text" value="wireless (SSID: myWiFi)"/>

Go to **WiFi Controller > Managed Access Points > Managed FortiAPs**. Edit the FortiAP and set **FortiAP Profile** to use the new profile.

Wireless Settings

FortiAP Profile

myprofile

Override Settings

Radio Settings Summary

Radio	Settings	Channels	SSIDs
Radio 1	AP (2.4 GHz Band)	1, 6, 11	wireless (SSID: myWiFi)

4. Allowing wireless access to the Internet

Go to **Policy & Objects > Policy > IPv4** and create a new policy.

Set **Incoming Interface** to the SSID and **Outgoing Interface** to your Internet-facing interface. Ensure that **NAT** is turned on.

Incoming Interface

wireless (SSID: myWiFi)

Source Address

all

Source User(s)

Click to add...

Source Device Type

Click to add...

Outgoing Interface

wan1

Destination Address

all

Schedule

always

Service

ALL

Action

ACCEPT

Firewall / Network Options

ON

 NAT

Use Destination Interface Address

Use Dynamic IP Pool

Fixed Port

Click to add...

5. Results

Go to **WiFi Controller > Managed Access Points > Managed FortiAPs**. A now appears beside the FortiAP, showing that the unit is authorized and online.

Mesh	Access Point	State	Connected Via
	FAP11C3X13000412		192.168.10.2

Connect to the SSID with a wireless device. After a connection is established, you are able to browse the Internet.